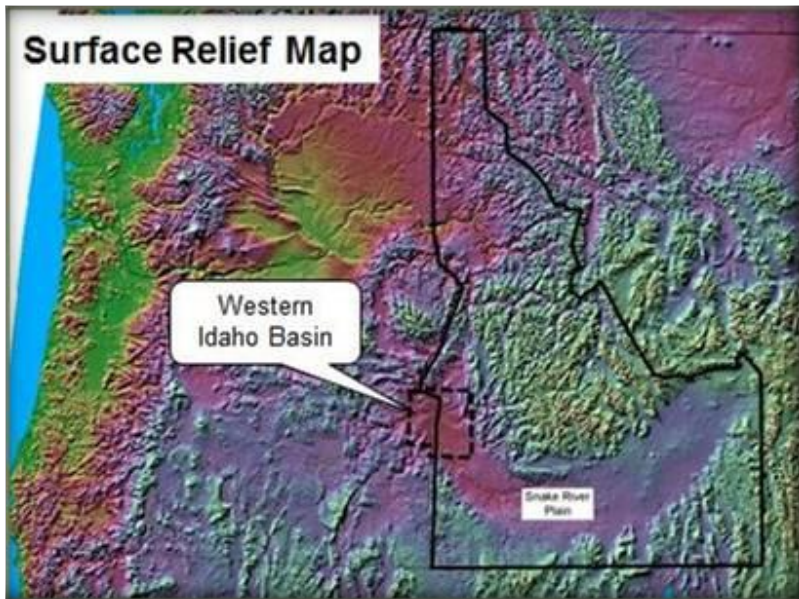




OIL AND GAS CONSERVATION COMMISSION

CHANGES TO IDAHO'S OIL AND GAS RULES

BACKGROUND



When natural gas reserves were discovered in western Idaho in 2009, Idaho's laws and rules regulating the exploration and extraction of oil and natural gas were nearly two decades old and industry practices and expectations had changed considerably in the past 20 years.

So the Oil and Gas Conservation Commission gave its approval for the Idaho Department of Lands (IDL) to begin a negotiated rulemaking process to update the state's legal and regulatory framework governing oil and gas.

Participation was quite broad during the negotiations. Industry representatives, non-government organizations, local governments, citizens, and other state agencies helped to improve the rules.

Substantive changes in the rules that generated the most discussion are:

- Basic surface owner protections were added
- Basic emergency response requirements were added
- Active and inactive wells are defined to discourage improper well abandonment
- Comprehensive pit requirements and surface reclamation standards were added
- Periodic testing of well integrity was added to prevent waste and protect fresh waters
- Well drilling and plugging rules were modified to better prevent waste and protect fresh waters
- Bond amounts are increased and additional bonding requirements were added
- Class II injection wells are no longer permitted under the rule
- A public comment period on applications is added
- Well drilling permit requirements were expanded
- Application, operating, and reporting requirements for well treatments, including hydraulic fracturing, were included



Idaho Department of Lands
P.O. Box 83720
Boise, ID 83720
(208) 334-0200
<http://www.idl.idaho.gov>

WATER PROTECTION

How do the rules address the use of carcinogenic substances for well treatments? The rules prohibit fluids to be injected at concentrations that exceed water quality standards, which effectively prohibits carcinogenic concentrations of fluids being placed in usable aquifers.

Do the rules address ground water protection? Modern drilling equipment and techniques have evolved to specifically not impact ground water. Technology evolved this way in order to minimize waste of the oil and gas when they escape the drill casing. Updated drilling and casing requirements in the rules, as well as cement bond logs for all completed wells, ensure that oil and gas wells completed in Idaho will not impact ground water. For example, two or three layers of steel casing and cement will separate the produced oil or gas from the shallow aquifers through which it passes.

Could the water in an oil and gas reservoir be used for irrigation or other purposes? The water in an oil or gas reservoir is trapped just as the oil and gas are trapped, so the water cannot be recharged. The water likely contains salts and other naturally occurring materials that make it unusable. This is common for produced waters in conventional oil and gas wells.

Will open pits still be allowed? Yes, if they are constructed with liners and follow other design requirements. Pits, if properly designed and constructed, are an effective way to manage drilling fluids and other fluids used or produced during oil and gas operations. Oil, however, may not be stored in open pits.

How will the fluids in pits be disposed of? If the fluids will not be reused at another site, then the fluid and residual solids must be properly handled and disposed of. The fluids may be evaporated partially or entirely. The remaining fluids and solids must then be tested to determine where they may be disposed of. A local landfill may be able to accept these materials depending on the test results and the type of landfill. If necessary, the fluids and liquids must be taken to a hazardous waste facility.

When will water monitoring be required, and how will it be done? Monitoring is required for well treatments, including hydraulic fracturing. The operator is required to identify all water wells within ¼ mile of the treated oil or gas well in the application. They are then required to notify the owners of those same wells that they may have an opportunity to get their water tested at the operator's expense. A notification in the local paper also will be published. The operator's application also must include a proposed monitoring plan, which will be reviewed by the Idaho Department of Environmental Quality (DEQ) and IDL. The agencies will evaluate the proposed plan to ensure that it will give reliable information concerning potentially affected aquifers. Sampling must occur before and after the proposed well treatment.

What chemicals will be used for hydraulic fracturing? The types and amounts of materials and chemicals used depend on the purpose of the proposed well treatment and the conditions in the oil and gas reservoir. The operator must disclose all material and chemicals in the application so the agencies may make an informed decision. The post-treatment report must include the actual amounts of chemicals used. Trade secret provisions in Idaho Code 9-340(D) may be invoked by the operator to prevent this information from being revealed to the public.

PUBLIC COMMENT ON APPLICATIONS

Can the public participate in permit reviews? Applications for drilling permits, well treatments, directional drilling, and pit construction will be posted on the IDL Web site a 15-day comment period. The purpose is to gather comments on whether or not a proposed application complies with the rules. Additionally, IDL will provide local counties or cities an electronic copy of the applications.



SEISMIC EXPLORATION

Are permits also required for seismic exploration?

Application to IDL is required for all geophysical exploration, including seismic. The operator must notify all landowners at least 30 days prior to entry, and a notification must be published in the local newspaper. Setbacks from structures and reclamation standards are also covered in the new rules. Bonding is also required, with a minimum bond of \$10,000.

(Left: Vibroseis trucks performing a seismic survey)

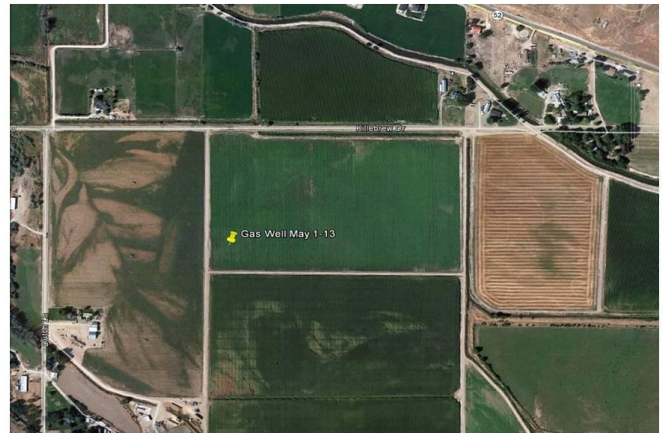
SPILLS, ACCIDENTS, AND EMERGENCY RESPONSE

Do the rules address spill and accidents? Yes. Operators must have an emergency response plan for all wells. All accidents and major fires must be reported to IDL and corrective actions taken. DEQ and EPA administered clean up requirements will apply to all spills and releases. Additionally, applications for well treatments must verify compliance with the EPA administered Spill Prevention, Control, and Countermeasures program.



Google Earth Image taken July 11, 2010

Proposed location for Gas Well May 1-13



Google Earth Image taken August 31, 2011

Gas Well May 1-13, drilled and plugged.

Images compare same tract of land before and after operation, showing little change in the landscape after reclamation is completed.

SURFACE RECLAMATION

What must be done when drilling is completed? Interim reclamation of drill sites must be completed within six months of rig removal. This includes any needed garbage and debris removal, regrading, topsoil replacement, and seeding. Access road and working space around the well may be left to allow all weather access.

What is required after a hole is plugged and abandoned? Within 12 months of plugging, all garbage and debris must be removed, roads and berms regraded, topsoil replaced, and revegetation completed. Compacted areas that will be revegetated must be ripped to loosen the soil. Revegetation must generally be the standard of surrounding areas. Other reclamation standards or requirements may be dictated by a surface use agreement. This could allow access roads to remain in place, or the area to be prepared for cultivation with no revegetation until planting time. The only requirement is for the site to be stable and non-eroding.

PROTECTION OF SURFACE OWNER RIGHTS

What if I only own the surface and someone else owns the oil and gas under my land? Basic surface owner protections were added to Idaho's rules. Surface owner protections in Idaho's rules essentially mirror basic case law and provisions from other states. Damage to improvements and agricultural income can reliably be determined by a third party. Damages related to potential uses or property values are subjective. Case law has established that the mineral estate is the dominant estate.

A Guide to Split Estates in Oil and Gas Development outlining other information related to surface owner rights is also available from IDL.

BONDING REQUIREMENTS

What changed with the bonding requirements and how does that compare to other states? Bond amounts are increased and additional bonding requirements are added to the rules. Bond amounts in the Idaho rules are comparable to other states' bonds. The states vary widely in their approach to bonding, and the bond amounts in the Idaho rules are higher than some states and lower than others, and are approximately the average.

How much are bonds now? Drill permit bonds cover the plugging and abandonment of the oil or gas well, as well as surface reclamation. Bonds for individual wells are \$10,000 plus \$1 per foot. Blanket bonds for 10 wells or more range from \$50,000 to \$150,000 depending on the number of wells covered.

Are the blanket bond amounts enough to plug every hole? Blanket bonds are not meant to cover the potential full cost of plugging every well covered by the bond. Bond defaults are almost always due to an operator's bankruptcy. Not all of the operator's wells are a liability; in fact, some of them may be considered an asset. As an asset, the bankruptcy trustee or the creditors will pick up ownership and responsibility for the wells, so IDL will not need to plug and abandon those wells with a blanket bond. Only the wells no one wants will need to be properly plugged with the operator's bond. Also, an operator is required to plug and abandon a "dry hole" before the drill rig moves on, limiting the operator's outstanding liabilities. Lastly, a well that is not used for two years or more will be declared inactive, and must then either be plugged or covered by an individual bond. Most states have blanket bonding, and IDL is not aware that they have been problematic in states with production.

How is the surface owner protected from damage and harm if they do not own the minerals (split estate)? The best method of protection is to negotiate a surface use agreement with an operator. In a split estate situation, if the surface owners and the operator cannot negotiate a surface use agreement then a minimum \$5,000 surface use bond will be held by IDL. If the two parties cannot agree on the bond amount, then a hearing will be scheduled to determine the final amount of the surface use bond. Drilling may commence prior to the hearing. The IDL will hold the bond pending either a surface use agreement between two parties that negates the need for the surface use bond, or reclamation of the surface disturbance.



AIR QUALITY

What about air quality? Idaho law gives the Idaho Department of Environmental Quality (DEQ) authority to monitor air quality in the state. The DEQ is responsible for ensuring that exploration and extraction activities operate in accordance with air quality laws.